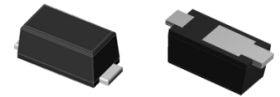


## Features

- Low  $V_F$  Schottky rectifier
- Low profile, typical thickness 0.8mm
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- Heatsink structure
- High temperature soldering guaranteed: 260°C/10 seconds



Package: iSGA  
(SOD-123HS)

## Absolute Maximum Ratings ( $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	GSPSL24	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	40	V
Maximum RMS voltage	$V_{RMS}$	28	V
Maximum DC blocking voltage	$V_{DC}$	40	V
Maximum average forward rectified current	$I_{F(AV)}$	2.0	A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	$I_{FSM}$	50	A
Operating junction temperature range	$T_J$	- 55 to + 125	$^\circ\text{C}$
Storage temperature range	$T_{STG}$	- 55 to + 150	$^\circ\text{C}$

## Electrical Characteristics ( $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Test Conditions	Symbol	GSPSL24	Unit
Maximum instantaneous forward voltage	$I_F=1\text{A}, T_A=25^\circ\text{C}$	$V_F$	0.40	V
	$I_F=2\text{A}, T_A=25^\circ\text{C}$		0.45	
Maximum DC reverse current at rated DC blocking voltage	$T_A=25^\circ\text{C}$	$I_R$	200	uA
	$T_A=100^\circ\text{C}$		20	mA
Typical junction capacitance	4.0 V, 1 MHz	$C_J$	120	pF
Typical thermal resistance <sup>1)</sup>	junction to ambient	$R_{\theta JA}$	100	$^\circ\text{C/W}$
	junction to case	$R_{\theta JC}$	50	
	junction to mount	$R_{\theta JM}$	25	

Note:1),The thermal resistance from junction to ambient,case or mount,mounted on P.C.B with 5×5mm copper pads,2 OZ,FR4 PCB

## Ratings and Characteristics Curves ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

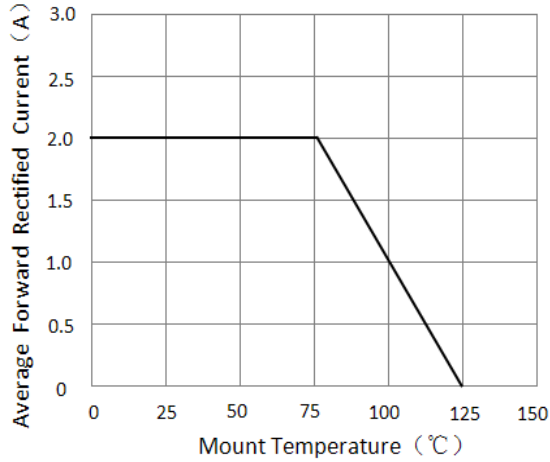


Figure 1. Forward Current Derating Curve

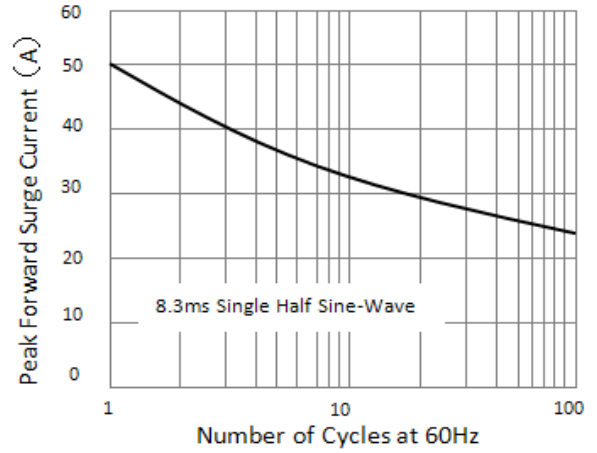


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

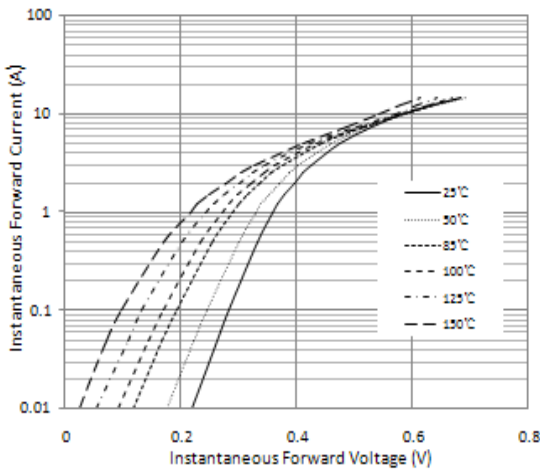


Figure 3. Typical Instantaneous Forward Characteristics

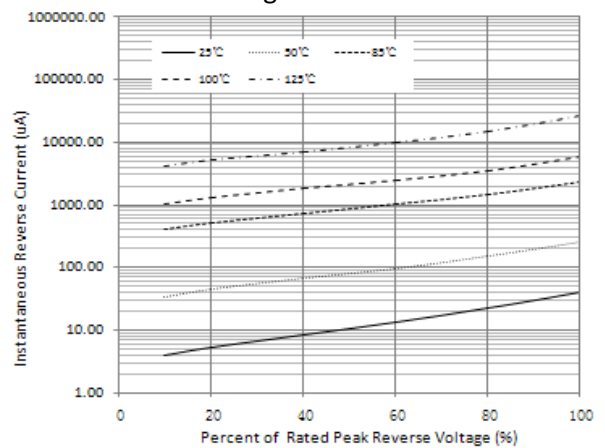


Figure 4. Typical Reverse Characteristics

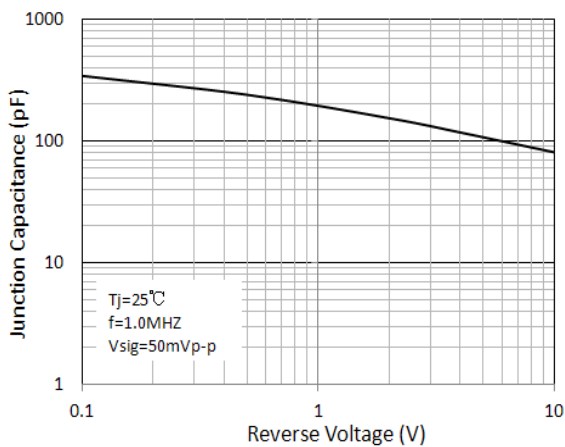
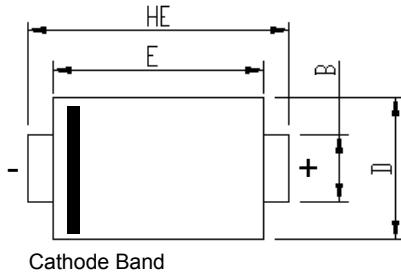


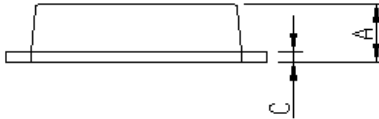
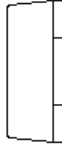
Figure 5. Typical Junction Capacitance

## Package Outline Dimensions

iSGA(SOD-123HS)

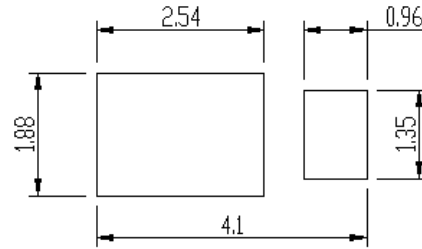
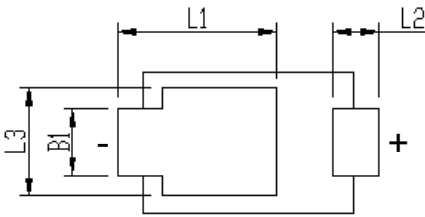


Cathode Band



Package	iSGA(SOD-123HS)	
Unit:mm	MIN	MAX
A	0.75	0.90
B	0.85	1.05
B1	0.85	1.05
C	0.1	0.25
D	1.9	2.1
E	2.9	3.1
L1	2.0	2.45
L2	0.4	0.85
L3	1.3	1.7
HE	3.5	3.9

Soldering footprint



## Package Information

Reel size	Quantity/reel	Quantity/inner Box	Quantity/Carton
7"	3K	30K	120K

## Tape & Reel Specification

